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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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08/11/2000

KENJI KATO

S004-4034(PCT)

3167

40627

7590

01/02/2009

ADAMS & WILKS
17 BATTERY PLACE
SUITE 1231
NEW YORK, NY 10004

EXAMINER

DINH, TAN X

ART UNIT

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2627

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/582,903	Applicant(s) KATO ET AL.	
	Examiner TAN X. DINH	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,7-9,120-122,134 and 136-141 is/are rejected.
- 7) ☒ Claim(s) 131-133,142 and 143 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

1) The amendment/preliminary amendment filed 10/03/2008 is acknowledged. Claim 135 has been cancelled. The features of claims 135 are added to independent claims 1 and 134.

2) The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the optical waveguide extending into the inverted conical or pyramidal hole (claims 1 and 134) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application.

Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted

after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d).

If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4) This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the

applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5) Claims **1,7-9,120-122** and **134-141** are rejected under 35 U.S.C. 103(a) as being unpatentable over **BREZOCZKY et al (European Patent Application, EPA 0-549-236 A2)**.

BREZOCZKY et al discloses a near-field optical head as claimed in claim 1, comprises a planar substrate having a first surface, a second surface disposed opposite to the first surface and an inverted conical or pyramidal hole extending through the first and second surfaces, the inverted conical or pyramidal hole having at least one fine aperture formed at an apex thereof and disposed in the first surface (Fig.3, first surface 41, second surface 31, inverted conical with fine aperture 37; see also figures 5 and 7 for different lay out of the optical head), an optical waveguide for propagating light along optical path (Fig.4, slider 51 and figure 5 in details of slider 51, aperture 76 for guiding laser beam 46; Fig.7, optical fiber 97), and a mirror disposed in the optical waveguide for bending in the direction of the fine aperture the optical path of the light propagated through the optical waveguide (Fig.5, mirror 61; Fig.7, mirror 103), *except to specifically show that (i) the optical waveguide extending into the inverted conical or*

pyramidal hole and (ii) the inverted conical or pyramidal hole having at least one curved slant surface.

It would have been obvious to someone within the level of skill in the art at the time of the invention was made to extend optical waveguide into inverted conical or pyramidal hole having at least one curved slant surface in BREZOCZKY et al's optical waveguide as claimed. The rationale is as follows:

a) As seen in BREZOCZKY et al's figure 7, the waveguide using optical fiber 97 which is flexible and extendable into any directions and/or places, obviously, it could be made to extend into inverted conical or pyramidal hole as claimed, and

b) The inverted conical or pyramidal hole having at least one curved slant surface are old and widely used in the optical recording art for guiding the light or laser beam, and therefore they are old and well known. It would have been obvious to use the old and well known inverted conical or pyramidal hole having at least one curved slant surface in near-field optical head such as BREZOCZKY et al's because, in the absence of any new or unexpected result, selecting of a known materials/elements based on its suitability for the intended use is deem obvious. In re LESHIN, 125 USPQ 416.

Claims 7-9 and 120-122 are rejected with the same reasons ser

forth in previously Office actions.

Claim 134 is rejected with the same reasons set forth in claim 1 above.

Claims 136-138 are rejected with the same reasons set forth in claims 7-9 above.

Claims 139-141 is rejected with the same reasons set forth in claims 120-122 above.

6) Claims **131-133,142** and **143** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7) Applicant's arguments filed **3/24/2008** have been fully considered but they are not persuasive.

Since the optical waveguide of BREZOCZKY et al could be an optical fiber 97 in figure 7, optical fiber is flexible and extendable which is capable of extending into any desirable places as needed.

For that reasons, claims **1,7-9,120-122** and **134,136-141** are still found rejectable as shown above.

8) **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to **37 CFR 1.136(a)** will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

9) Any inquiry concerning this communication or earlier communications from the examiner should be directed to **TAN Xuan DINH** whose telephone number is **(571)272-7586**. The examiner can normally be reached on **Monday - Friday from 9:00AM to 5:00PM**.

The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the **Patent Application Information Retrieval (PAIR)** system. Status information for published applications may be obtained from either **Private PAIR** or **Public PAIR**. Status information for unpublished applications is available through **Private PAIR only**. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the **Private PAIR system**, contact the **Electronic Business Center (EBC)** at 866-217-9197 (toll-free) .

/TAN Xuan DINH/
Primary Examiner, Art Unit 2627
December 29, 2008